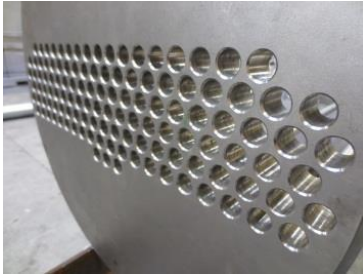


Alloy Acid Coolers

Noram SX™ is the trademark for the austenitic stainless steel, UNS S32615, which was developed by Sandvik in Sweden specifically for the use in hot concentrated Sulphuric Acid. SX steel is considered the benchmark in sulphuric acid service with over 25 years of unparalleled performance offering numerous advantages over other materials of construction.



One of the greatest improvements in acid cooler design is the introduction of the alloy shell and tube acid coolers.

Noram SX™ acid coolers provides a very simple, reliable and low maintenance solution for acid cooling since the excellent corrosion resistance of Noram SX™ eliminates the need for anodic protection. In combination with other carefully selected alloys it also allows for the use of a variety of other cooling media.



Operation is considerably simplified without any electronics to monitor or control. The risk of acid cooler failures resulting from malfunction or operational problems with the electronic passivation system is completely eliminated.

Maintenance cost is minimized by eliminating the need for inspection and maintenance of the anodic protection system, as well as for the associated spare parts.



The excellent properties of the material allows Noram SX™ acid coolers to be designed for an optimal thermal performance, without the limitations on acid velocity and acid temperature as is typical for anodically protected coolers and plate and frame coolers. The benefit is a compact design with a large operating flexibility.

Every alloy acid cooler is individually designed and optimised to meet the specific process conditions and preferences of the client. The performance is well proven and the team at Noram has more than 25 years of experience in the design and operation of shell and tube acid coolers.



The alloy acid cooler is the perfect alternative for replacement acid coolers, particularly in cases of increased capacity as well as for new installations. The long life, reliable and simple operation results in a low life cycle cost.

Offered equipment includes:

- DT, AT, FAT and Product Acid Coolers
- Boiler feed water heaters
- Sea water Acid Coolers